

JON M. HUNTSMAN, JR. Governor

GARY HERBERT
Lieutenant Governor

# Department of Environmental Quality

Dianne R. Nielson, Ph.D. *Executive Director* 

DIVISION OF AIR QUALITY Richard W. Sprott Director

DAQE-IN0653015-06

September 8, 2006

Ron Hix Plant Manager G-P Gypsum Corporation 200 South State PO Box 80 Sigurd, Utah 84657

Dear Mr. Hix:

Re: Intent to Approve: Modification to DAQE-696-00 by De-Listing Grandfathered Equipment and

Other Changes, Sevier County - CDS SM; ATT; NSPS; HAPs; TITLE V Minor

Project Code: N0653-013

The attached document is the Intent to Approve (ITA) for the above-referenced project. ITAs are subject to public review. Any comments received shall be considered before an Approval Order is issued.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Tim De Julis. He may be reached at (801) 536-4012.

Sincerely,

Tim Blanchard, Acting Manager Minor New Source Review Section

TB:TDJ:kw

cc: Central Utah Public Health Department

## STATE OF UTAH

# **Department of Environmental Quality**

## **Division of Air Quality**

# INTENT TO APPROVE: Modification to DAQE-696-00 by De-Listing Grandfathered Equipment and Other Changes

Prepared By: Tim De Julis, Engineer

(801) 536-4012 Email: tdejulis@utah.gov

#### INTENT TO APPROVE NUMBER

**DAQE-IN0653015-06** 

Date: September 8, 2006

# **G-P Gypsum Corporation**

Source Contact Christopher Thompson (435) 896-0381 x328

Richard W. Sprott Executive Secretary Utah Air Quality Board

#### Abstract

GP – Gypsum Corporation (GP-Gypsum), owner and operator of the wallboard manufacturing plant located in Sigurd, Sevier County has requested permission to modify their operation as follows: replace the existing, grandfathered, crusher bucket elevator with a new bucket elevator, de-list other grandfathered equipment items, place exit grain loading limitations on a number of the fabric filter baghouses, paving all in-plant haul roads, and de-listing equipment items removed from the plant or no longer in use. The Sigurd wallboard plant will also commence manufacturing glass matted wallboard.

Sevier County is an attainment area of the National Ambient Air Quality Standards (NAAQS) for all pollutants. New Source Performance Standards (NSPS) apply to this source (40 CFR 60 Subpart A, Subpart OOO, and Subpart UUU). National Emission Standards for Hazardous Air Pollutants (NESHAP) and Maximum Achievable Control Technology (MACT) regulations do not apply to this source. Title V of the 1990 Clean Air Act applies to this source. This synthetic minor source does not require a Title V operating permit.

The emissions, in tons per year, will change as follows:  $PM_{10}$  (- 11.74),  $SO_2$  (- 0.02), VOC (- 0.02)

The changes in emissions will result in the following, in tons per year, potential to emit totals:  $PM_{10} = 60.35$ ,  $NO_x = 53.10$ ,  $SO_2 = 2.45$ , CO = 58.10, VOC = 59.67, HAPs = 0.87

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Approval Order (AO) by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notice of intent to approve will be published in the Richfield Reaper on September 13, 2006. During the public comment period the proposal and the evaluation of its impact on air quality will be available for both you and the public to review and comment. If anyone so requests a public hearing it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated.

Please review the proposed AO conditions during this period and make any comments you may have. The proposed conditions of the AO may be changed as a result of the comments received. Unless changed, the AO will be based upon the following conditions:

#### **General Conditions:**

1. This Approval Order (AO) applies to the following company:

Site OfficeCorporate Office LocationG-P Gypsum CorporationGeorgia-Pacific Corporation200 South State Street133 Peachtree NE 21st FloorSigurd, Utah 84657Atlanta, Georgia 30348-5605

Phone Number (435) 896-0381 (404) 652-7177 Fax Number (435) 896-1821 (404) 827-7025 The equipment listed in this AO shall be operated at the following location:

200 South State Street, Sigurd, Sevier County

Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD 1927 4,298.50 kilometers Northing, 416.50 kilometers Easting, Zone 12

- 2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.
- 3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.
- 4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401.
- 5. All records referenced in this AO or in applicable NSPS, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request. Records shall be kept for the following minimum periods:
  - A. Emission inventories Five years from the due date of each emission statement or until the next inventory is due, whichever is longer.
  - B. All other records Five years
- 6. G-P Gypsum shall conduct its operations of the Sigurd wallboard manufacturing plant in accordance with the terms and conditions of this AO, which was written pursuant to GP Gypsum's Notice of Intent submitted to the Division of Air Quality (DAQ) on May 5, 2006 and additional information submitted to the DAQ on May 8, 2006, May 12, 2006, May 24, 2006, June 6, 2006, June 21, 2006 and August 8, 2006.
- 7. This AO shall replace the AO (DAQE-696-00) dated December 7, 2000.
- 8. The approved installations shall consist of the following equipment (or equivalent\*):

#### **Material Handling and Production Equipment**

A.	Apron Feeder	40 CFR 60 Subpart OOO
B.	Jaw Crusher	40 CFR 60 Subpart OOO
C.	Hammer Mill	40 CFR 60 Subpart OOO
D.	Portable Grinder	40 CFR 60 Subpart OOO
E.	Portable Feeder/Conveyor System	40 CFR 60 Subpart OOO

- F. Raymond Mill #1
- G. Raymond Mill #2
- H. North Hammer Screen

I.	South Hammer Screen			
J.	Centrifugal Mill #2			40 CFR 60 Subpart OOO
K.	Bagging System			40 CFR 60 Subpart OOO
		North		
	2)		bagger	
	3)		pag loaders	
	4)		oading	
L.		er Scree		
M.	•	Ball Mi		
N.	_	Shaker		40 CFR 60 Subpart OOO
Ο.	_	Grindin	g mill	40 CFR 60 Subpart OOO
P.	Storag			
	1)	Plaste		40 CFR 60 Subpart OOO
	2)	Baggi	ng storage bins	
		a)	denscal bin	
		b)	casting bin	
		c)	south bin	
		d)	north bin	
		e)	edge banding bin	
		f)	cooling bin	
		g)	east bin	
	3)		ıltural gypsum	
	4)	Mill st	torage bins	
		a)	(3) rock bins	
		b)	(3) pan feeders	
		c)	(3) raymond mill feed bins	
		d)	CaCl mixing tank	
		e)	centrifugal mill feed bin	
		f)	mixer weigh hopper	
	5)		feed (3)	
	6)	Board		
		a)	North	
		b)	East	
		c)	South	
		d)	West	
		e)	Cooling	
	7)	Additi	ve feeders (9)	
		a)	Boric acid	
		b)	Potash	
		c)	Disal	
		d)	Clay	
		e)	Vermiculite	
		f)	BMA	
		g)	Starch	
		h)	Sugar	
		i)	Fiberglass	
	8)		ete bin	
	9)	Reject	product bins	

Q.	Crusher Rock Bucket Elevator	40 CFR 60 Subpart OOO
R.	Continuous Bucket Elevator	_
S.	Hot Pit Bucket Elevator	
T.	Reclaim Bucket Elevator	
U.	Dust Collector Bucket Elevator	
V.	Upper Mill Bucket Elevator	
W.	South Mill Bucket Elevator	
X.	North Mill Bucket Elevator	
Y.	South Mill Packing Bucket Elevator	
Z.	Alpha Bucket Elevator	40 CFR 60 Subpart OOO
AA.	South Board Plant Recirculation Bucket Elevator	or
BB.	North Board Plant Recirculation Bucket Elevator	or
CC.	Various Screw conveyors	
DD.	Hot pits (3)	
EE.	Centrifugal mills (3)	
FF.	Hummer screens (2)	40 CFR 60 Subpart OOO
GG.	Mixers (2)	
HH.	Pin mixer	
II.	Board forming line	
JJ.	Dry end bundler	
KK.	Riser Machine	
LL.	Two (2) Alpha Dryers	40 CFR 60 Subpart UUU

#### **Combustion Devices**

Three (3) Calcining Kettles MM.

Fuel Type Natural Gas

Maximum Heat Input: 16,500,000 Btu/hr - each

One (1) Wallboard Dryer consisting of three (3) separate burner packages NN.

Fuel Type Natural Gas

5,500,000 Btu/hr, 18,000,000 Btu/hr, and 20,000,000 Btu/hr respectively; 43,500,000 Maximum Heat Input:

Btu/hr - total

### **Cyclones and Fabric Filter Baghouses**

00.	Two (2	2) Cyclonic Separators		
PP.		Filter Baghouses		
	1)	Hammer Mill	EP-CD	40 CFR 60 Subpart OOO
	2)	Raymond Mill 1a	EP-RD1.1	1
	3)	Raymond Mill 1b	EP-RD1.2	
	4)	Raymond Mill 2a	EP-RD2.1	
	5)	Raymond Mill 2b	EP-RD2.2	
	6)	Mill Bin 1	<b>EP-MBVD</b>	
	7)	Mill Bin 2	EP-MBVD2	
	8)	End Trim	EP-ETD	
	9)	Alpha	EP-AD	40 CFR 60 Subpart OOO
	10)	Bulk Plaster Loading	EP-BPL	40 CFR 60 Subpart OOO
	11)	<b>Board Plant Bins</b>	EP-BDBVD	

12)	Kettle #1	EP-KD1	
13)	Kettle #2	EP-KD2	
14)	Kettle #3	EP-KD3	
15)	Densite bagho	use (exhausts to building interior)	**

Cement baghouse (exhausts to building interior)

#### Combustion Devices rated less than 5,000,000 Btu/hr – each

16)

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- Ten (10) paper heaters QQ.
- RR. One (1) Alpha Boiler
- One (1) Oil Heater SS.
- Raymond Mill #1 pre-heater TT.
- Raymond Mill #2 pre-heater UU.
- Alpha Baghouse Duct Heater VV.

#### **Other Equipment**

WW. Various Mobile Equipment Front-end loaders Bulldozers

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9. The following minimum Board Dryer stack heights shall be maintained:

A.	Dryer wet end	29.53 feet (9.00 meters)
B.	Dryer vents 1 & 3	28.71 feet (8.75 meters)
C.	Dryer vent 2	27.89 feet (8.50 meters)
D.	Dryer dry end	31.17 feet (9.50 meters)

- 10. The Kettle fabric filter baghouse #1 (EP-KD1) shall control process streams from the Calcining Kettle #1 (KD1). This fabric filter baghouse shall be sized to handle at least 3,760 dry-standard-cubic-feet-per-minute (DSCFM). All exhaust air from the Calcining Kettle #1 shall be routed through this fabric filter baghouse before being vented to the atmosphere.
- 11. The Kettle fabric filter baghouse #2 (EP-KD2) shall control process streams from the Calcining Kettle #2 (KD2). This fabric filter baghouse shall be sized to handle at least 2,580 DSCFM. All exhaust air from the Calcining Kettle #2 shall be routed through this fabric filter baghouse before being vented to the atmosphere.
- 12. The Kettle fabric filter baghouse #3 (EP-KD3) shall control process streams from the Calcining Kettle #3 (KD3). This fabric filter baghouse shall be sized to handle at least 3,777 DSCFM. All exhaust air from the Calcining Kettle #3 shall be routed through this fabric filter baghouse before being vented to the atmosphere.

<sup>\*</sup> Equivalency shall be determined by the Executive Secretary.

<sup>\*\*</sup> This equipment is listed for informational purposes only.

- 13. The Raymond Mill #1 fabric filter baghouses (EP-RD1.1 and EP-RD1.2) shall control process streams from the Raymond Mill #1 (RD1). Each of these fabric filter baghouses shall be sized to handle at least 2,838 DSCFM (5,676 DSCFM total). All exhaust air from the Raymond Mill #1 shall be routed through these fabric filter baghouse before being vented to the atmosphere.
- 14. The Raymond Mill #2 fabric filter baghouses (EP-RD2.1 and EP-RD2.2) shall control process streams from the Raymond Mill #2 (RD2). Each of these fabric filter baghouses shall be sized to handle at least 2,481 DSCFM (4,962 DSCFM total). All exhaust air from the Raymond Mill #2 shall be routed through these fabric filter baghouse before being vented to the atmosphere.
- 15. The Board bin fabric filter baghouse (EP-BDBVD) shall control process streams from the following emission sources:
  - North board bin
  - B. South board bin
  - C. East board bin
  - D. West board bin
  - E. Cooling board bin
  - F. South board plant recirculation bucket elevator
  - G. North board plant recirculation bucket elevator

This fabric filter baghouse shall be sized to handle <u>at least 6,792 DSCFM</u>. All exhaust air from these processes shall be routed through this fabric filter baghouse before being vented to the atmosphere.

- 16. The Bulk plaster loading fabric filter baghouse (EP-BPL) shall control process streams from the following emission sources:
  - A. Bulk board plaster bin
  - B. Bulk truck loading

This fabric filter baghouse shall be sized to handle <u>at least 2,200 DSCFM</u>. All exhaust air from these processes shall be routed through this fabric filter baghouse before being vented to the atmosphere.

- 17. The End trim fabric filter baghouse (EP-ETD) shall control process streams from the following emission sources:
  - A. Drywall forming line
  - B. Dry end bundler
  - C. Pin mixer
  - D. Riser machine

This fabric filter baghouse shall be sized to handle <u>at least 9,130 DSCFM</u>. All exhaust air from these processes shall be routed through this fabric filter baghouse before being vented to the atmosphere.

- 18. The Alpha dryer fabric filter baghouse (EP-AD) shall control process streams from the following emission sources:
  - A. Alpha re-heater
  - B. Alpha collector heater
  - C. Alpha dryer
  - D. Alpha ball mill
  - E. Alpha grinding mill

This fabric filter baghouse shall be sized to handle <u>at least 3,462 DSCFM</u>. All exhaust air from these processes shall be routed through this fabric filter baghouse before being vented to the atmosphere.

- 19. The Crusher fabric filter baghouse (EP-CD) shall control process streams from the following emission sources:
  - A. Hammer mill
  - B. Hammer mill bucket elevator

This fabric filter baghouse shall be sized to handle <u>at least 6,200 DSCFM</u>. All exhaust air from these processes shall be routed through this fabric filter baghouse before being vented to the atmosphere.

- 20. The Mill bin #1 fabric filter baghouse (EP-MBVD) shall control process streams from the following emission sources:
  - A. Alpha bucket elevator
  - B. Alpha sizing screen
  - C. Gypcrete bin
  - D. Denscal bin
  - E. Casting bin
  - F. North mill bin
  - G. South mill bin
  - H. South mill packing bucket elevator

This fabric filter baghouse shall be sized to handle <u>at least 6,792 DSCFM</u>. All exhaust air from these processes shall be routed through this fabric filter baghouse before being vented to the atmosphere.

- 21. The Mill bin #2 fabric filter baghouse (EP-MBVD2) shall control process streams from the following emission sources:
  - A. LP feed bin
  - B. Mill cyclonic separator #1
  - C. Mill cyclonic separator #2
  - D. The two (2) Raymond mill feed bins
  - E. Pan feeders
  - F. Dust collector bucket elevator
  - G. The three (3) rock bin feed conveyors

- H. Edge banding bin
- I. North Hummer screen
- J. Center Hummer screen
- K. South Hummer screen
- L. Reject product bin
- M. West reversible highline screw conveyor
- N. East reversible highline screw conveyor
- O. Hot pit bucket elevator
- P. Cooling bin
- Q. Calcining kettles feed bins
- R. Agricultural gypsum bin
- S. North screen
- T. South screen
- U. Air separator by-pass
- V. South board bin screw conveyor
- W. North mill bucket elevator
- X. South mill bucket elevator
- Y. Upper mill bucket elevator
- Z. Reclaim bucket elevator
- AA. Continuous bucket elevator

This fabric filter baghouse shall be sized to handle <u>at least 24,765 DSCFM</u>. All exhaust air from these processes shall be routed through this fabric filter baghouse before being vented to the atmosphere.

- 22. A manometer or magnehelic pressure gauge shall be installed to measure the differential pressure across the fabric filters in each baghouse listed in condition #8 above. Static pressure differential across the fabric filters shall be between 1.5 to 6 inches of water column in each case. The pressure gauges shall be located such that an inspector /operator can safely read the indicator at any time. Each reading shall be accurate to within plus or minus 1.0 inches water column. The instruments shall be calibrated or replaced with new instruments according to the manufactures instructions at least once every 12 months. Intermittent recording of the reading from each device is required on a once per operational day basis.
- 23. GP Gypsum shall notify the Executive Secretary in writing when the installation of the crusher rock bucket elevator (condition #8-Q) has been completed and is operational, as an initial compliance inspection is required. To insure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If the construction and/or installation are not complete within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-18.

## **Limitations and Tests Procedures**

24. Emissions to the atmosphere at all times from the indicated emission point(s) shall not exceed the following rates and concentrations:

Source: (#1 Raymond Mill Baghouses Exhaust Stacks)

<u>Pollutant</u>	<u>lb/hr</u>	grains/dscf (68 °F, 29.92 in Hg)	
PM <sub>10</sub>	0.78	0.016	
Source: (#2	Raymond Mill Baghous	es Exhaust Stacks)	
<u>Pollutant</u>	<u>lb/hr</u>	grains/dscf (68 °F, 29.92 in Hg)	
PM <sub>10</sub>	0.68	0.016	
Source: (#1	and #3 Kettle Baghouse	es Exhaust Stacks)	
<u>Pollutant</u>	<u>lb/hr</u>	grains/dscf (68 °F, 29.92 in Hg)	
PM <sub>10</sub>	0.52	0.016	
Source	e: (#2 Kettle Baghouse E	xhaust Stack)	
Pollutant	<u>lb/hr</u>	grains/dscf (68 °F, 29.92 in Hg)	
PM <sub>10</sub>	0.35	0.016	
Source: (Board Pl	ant Bins and Crusher Ba	aghouses Exhaust Stacks)	
<u>Pollutant</u>	<u>lb/hr</u>	grains/dscf (68 °F, 29.92 in Hg)	
PM <sub>10</sub>	0.53	0.01	
Source: (Mill Bins Baghouse Exhaust Stack)			
<u>Pollutant</u>	<u>lb/hr</u>	grains/dscf (68 °F, 29.92 in Hg)	
PM <sub>10</sub>	0.58	0.01	

25.

Source: (Alpha Baghouse Exhaust Stack)

Pollutant	<u>lb/hr</u>	<u>grains</u> (68 °F	/ <u>dscf</u> , 29.92 in Hg)		
PM <sub>10</sub>	0.30	0.01			
\$	Source: (End Trim	Baghouse Exhaust	Stack)		
<u>Pollutant</u>	<u>lb/hr</u>	grains (68 °F	/ <u>dscf</u> , 29.92 in Hg)		
PM <sub>10</sub>	0.78	0.01			
Sou	arce: (Mill Bin Vent	t Baghouse 2 Exhau	ıst Stack)		
<u>Pollutant</u>	<u>lb/hr</u>	grains (68 °F	/ <u>dscf</u> , 29.92 in Hg)		
PM <sub>10</sub>	2.12	0.01			
Source	Source: (Bulk Plaster Loading Baghouse Exhaust Stack)				
<u>Pollutant</u>	<u>lb/hr</u>	grains (68 °F	/ <u>dscf</u> , 29.92 in Hg)		
PM <sub>10</sub>					
Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below:					
A.			Testing	Test	
Emissi	ons Point	Pollutant	<u>Status</u>	Frequency	
•	ghouses st stacks	PM <sub>10</sub>	*	@	

- B. <u>Testing Status</u>
  - \* Initial compliance testing is required. The initial test date shall be performed as soon as possible and in no case later than 180 days after the start up of a new emission source. A compliance test is required o the emission point that has an emission rate limit.
  - @ Compliance test at least once every two years, subsequent to the initial test. The Executive Secretary may require testing at any time.

#### C. <u>Notification</u>

The Executive Secretary shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary.

The source test protocol shall be approved by the Executive Secretary prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held, if directed by the Executive Secretary.

#### D. Sample Location

The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

#### E. Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2 or other testing methods approved by the Executive Secretary.

#### F. $\underline{PM}_{10}$

For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201, 201a, or other testing methods approved by the Executive Secretary. The back half condensibles shall also be tested using the method specified by the Executive Secretary. All particulate captured shall be considered  $PM_{10}$ .

For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate, or other testing methods approved by the Executive Secretary. The back half condensibles shall also be tested using the method specified by the Executive Secretary. The portion of the front half of the catch considered PM<sub>10</sub> shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Executive Secretary.

The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.

#### G. <u>Nitrogen Oxides (NO<sub>x</sub>)</u>

40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, 7E, or other testing methods approved by the Executive Secretary.

#### H. Carbon Monoxide (CO)

40 CFR 60, Appendix A, Method 10, or other testing methods approved by the Executive Secretary.

#### I. Calculations

To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary, to give the results in the specified units of the emission limitation.

#### J. New Source Operation

For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the production rate listed in this AO. If the maximum AO allowable production rate has not been achieved at the time of the test, the following procedure shall be followed:

- 1) Testing shall be at no less than 90% of the production rate achieved to date.
- 2) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
- The owner/operator shall request a higher production rate when necessary. Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum AO production rate is achieved.

#### K. Existing Source Operation

For an existing source/emission point, the production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

- 26. Visible emissions from the following emission points shall not exceed the following values:
  - A. All boiler exhaust stacks 10% opacity

- B. All heater exhaust stacks 10% opacity
- C. All bagging systems 10% opacity
- D. All bulk plaster loading 10% opacity
- E. All baghouse exhaust stacks 10% opacity
- F. All screens 10% opacity
- G. All conveyor transfer points 10% opacity
- H. All crushers 15% opacity
- I. All other points 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

For sources that are subject to NSPS, opacity shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9.

- 27. The following limits shall not be exceeded:
  - A. 125 tons of material throughput to the primary jaw crusher per hour
  - B. 12 hours of primary jaw crusher operation per calendar day
  - C. 10 hours of portable grinder operation per calendar day
  - D. 1,000 hour of portable grinder operation per rolling 12-month period
  - E. 33.8 tons of finished wallboard per hour from the Board Dryer per day
  - F. 17,520 tons of alpha gypsum produced per rolling 12-month period
  - G. 5,500 pounds of alpha gypsum produced per hour
  - H. 381,060,000 standard cubic feet of natural gas consumed per rolling 12-month period

To determine compliance with a rolling 12-month total the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. To determine compliance with a daily limit the owner/operator shall tabulate the amount of material produced or processed during each calendar day. A calendar day is the period of time from midnight to midnight. Records of consumption/production shall be kept for all periods when the plant is in operation. Wallboard and alpha gypsum production shall be determined by examination of weight receipts and/or customer billing records. Natural gas consumption shall be determined by examination of fuel supplier billing records. The records of production shall be kept on a daily basis. The records of natural gas consumption shall be kept on a monthly basis. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log.

#### **Roads and Fugitive Dust**

28. GP Gypsum shall abide by a fugitive dust control plan acceptable to the Executive Secretary for control of all dust sources associated with the wallboard manufacturing plant. GP Gypsum shall submit a fugitive dust control plan to the Executive Secretary, attention: Compliance Section, for approval within 30 days of the date of this AO.

The fugitive dust control plan shall include all necessary controls such that the silt loading values for each type of road or operational area contained in the Notice of Intent dated

- May 5, 2006 are not exceeded. The Executive Secretary may require silt loading tests of any or all of these roads or operational areas at any time.
- 29. GP Gypsum shall abide by all applicable requirements of R307-205 for Fugitive Emission and Fugitive Dust sources.
- 30. Visible fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall not exceed 20% opacity. Visible emission determinations for traffic sources shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Six points, distributed along the length of the haul road or in the operational area, shall be chosen by the Executive Secretary or the Executive Secretary's representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made 1/2 vehicle length or greater behind the vehicle and at approximately 1/2 the height of the vehicle or greater. The accumulated six readings shall be averaged for the compliance value.
- 31. All unpaved roads, and other unpaved operational areas that are used by mobile equipment shall use the application of water, and/or chemical treatment to control fugitive dust. Treatment shall be of sufficient frequency, and quantity to maintain the surface material in a damp/moist condition unless it is below freezing. If chemical treatment is to be used, the plan must be approved by the Executive Secretary. Records of water, and/or chemical treatment shall be kept for all periods when the plant is in operation. The records shall include the following items:
  - A. Date
  - B. Number of treatments made, dilution ratio, and quantity
  - C. Rainfall received, if any, and approximate amount
  - D. Time of day treatments were made
  - E. Records of temperature if the temperature is below freezing.
- 32. The in-plant access road shall be paved, and shall be periodically swept, or sprayed clean as dry conditions warrant or as determined necessary by the Executive Secretary. Records of cleaning paved roads shall be kept for periods the plant is in operation.
- 33. The road lengths shall be as follows:
  - A. The in-plant, unpaved haul road shall not exceed 0.10 miles in length.
  - B. The paved in-plant access road shall not exceed 0.26 miles in length.

#### **Fuels**

34. The owner/operator shall use natural gas as fuel in the combustion devices listed in condition #8-MM, #8-NN, and #8-QQ through #8-VV.

#### **Federal Limitations and Requirements**

35. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A, 40 CFR 60.1 to 60.18, Subpart OOO,

40 CFR 60.670 to 60.676 (Standards of Performance for Non-Metallic Mineral Processing Plants), Subpart UUU, 40 CFR 60.730 to 60.737 (Standards of Performance for Calciners and Dryers in Mineral Industries) apply to this installation.

#### **Records & Miscellaneous**

- 36. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on the information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on the equipment authorized by this AO shall be recorded.
- 37. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.
- 38. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:

http://www.airquality.utah.gov/

The annual emissions estimations below include point source, fugitive dust, and road dust, and do not include fugitive emissions, tail pipe emissions, or grandfathered emissions. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, Maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for GP Gypsum's wallboard manufacturing plant are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	PM <sub>10</sub>	60.35
B.	SO <sub>2</sub>	2.45
C.	NO <sub>x</sub>	53.10
D.	CO	58.10
E.	VOC	59.67

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F.	HAPs	
	Total HAPs	0.87

The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final Approval Order.

Sincerely,

Tim Blanchard, Acting Manager Minor New Source Review Section